

Course Syllabus

MAT 099 ADV Introduction to College Mathematics 3 Credit hours

I. COURSE DESCRIPTION

A non-specialized course in mathematics that surveys the basic concepts of high school mathematics. (Does not count toward a major or minor in mathematics. Increases the number of hours in a degree program by three credit hours. Does not satisfy general education requirement.)

Prerequisites: None

II. ACADEMIC MISSION

Oral Roberts University's academic mission is to transform students by the power of the Holy Spirit into whole, competent servant-leaders through liberal arts and professional education that is fully Christian. Within a Spirit-filled healing community, administration, faculty, and staff love and serve students by helping them grow in knowledge, skills, wisdom, character, and spirit. Student transformation is measured through the evaluation of student expression of University learning outcomes as demonstrated through the following outcomes.

- 1 Spiritual Integrity
- 2 Personal Resilience
- 3 Intellectual Pursuit
- 4 Global Engagement
- 5 Bold Vision

The last page of this syllabus, "COURSE INVENTORY for ORU's Course Objectives," indicates how this course supports ORU's academic mission and ORU's whole-person approach to learning outcomes.

III. PROGRAM OUTCOMES

This course is offered by the School of Liberal Arts under ORU's College of Arts and Cultural Studies. It supports the program outcomes of ORU's General Education program, a common core curriculum required for every ORU undergraduate major. The outcomes of General Education reflect ORU's founding commitment to comprehensive whole-person liberal arts education. General Education has four program outcomes, listed below. This course supports the item marked in bold text below and with an asterisk (*).

1. Core Literacy: Have a breadth of knowledge essential to a classical Spirit-empowered liberal arts education.*

- 2. Intercultural Knowledge and Engagement: Have an understanding of, and demonstrate sensitivity towards, cultural differences from an historical and global Christian worldview with engagement through intercultural experiences and by using effective oral and written communication techniques.
- 3. Lifelong Wellness: Have the theoretical and practical knowledge and skills to lead a life-long physically active and healthy lifestyle spirit, mind, and body.
- 4. Global Issues, Critical Thinking, and Creativity: Have the ability to lead, collaborate, and serve as part of a team in order to ethically, critically, and creatively solve big problems by applying bold innovative solutions from a diverse set of perspectives.

IV. COURSE GOALS

The goals of this course are to enable the student to understand the concrete approaches to mathematical concepts; to effectively discuss mathematical ideas in class forums; to development mathematical vocabulary; and to acquire and strengthen basic algebraic skills. Another goal of this course is to make a smoother transition to either of the required general education math courses.

V. COURSE OBJECTIVES

After successfully completing this course, I should be able to:

- 1. Perform operations on whole numbers, integers, fractions, and decimals.
- 2. Write ratios, proportions, and percents and solve problems with them.
- 3. Perform operations on real number algebraic expressions and equations.
- 4. Solve and graph linear equations.
- 5. Discuss mathematical and math-related concepts.

VI. TEXTBOOK AND OTHER LEARNING RESOURCES

Before you purchase your required textbook(s), click on the ORU Bookstore link to verify whether digital texts are provided as part of your Follett ACCESS course fee. <u>http://www.bkstr.com/oralrobertsstore/home</u>

Required Materials

Textbook:

Lial, Margaret, John Hornsby, Terry McGinnis, Stanley Salzman, and Diana Hestwood. *Developmental Mathematics* (2012). 4th ed. Boston: Addison-Wesley. [Standalone MyMathLab Access Code ISBN: 9780134764856]

This course uses courseware, so you cannot opt-out of the ACCESS program.

Other required materials:

Graphing calculator (Preferably a Texas Instruments TI-83 or TI-84)

Optional Materials

Textbook: None Other: None

VII. POLICIES AND PROCEDURES

A. University Policies and Procedures

1. **Plagiarism:** The ORU Catalog explicitly addresses the issue of plagiarism. Make sure you know <u>ORU's policy on plagiarism</u> and <u>what is considered plagiarism</u>.

 Privacy: By law, students are entitled to privacy regarding their records. The Family Educational Rights and Privacy Act of 1974 (FERPA), as amended and available in the <u>ORU University</u> <u>Catalog</u>, sets forth requirements designed to protect the privacy of student education records. The law governs access to records maintained by educational institutions and the release of information from those records.

3. Whole Person Assessment Requirements:

a. Specify which, if any, Whole Person Assessment requirements there are for this course. None for this course.

B. School and/or Department Policies and Procedures

1. **Participation:** Participation in each online class through discussion forums, assignments, and all other course activities count as your attendance in the course. Lack of participation can reduce a student's grade or deny credit for the course.

2. Class Assignments

- a. Students need to have the appropriate textbooks, course materials, and other supplies as designated by the professor.
- b. Professors may refuse to accept an assignment if it has inappropriate content, does not meet the assignment's criteria (e.g., not typed, incorrectly documented), is incomplete, is suspected of plagiarism, or is turned in too late.

3. Late Work

- a. The student is responsible for obtaining class assignments and materials, and all work is expected to be completed as scheduled. The professor may not accept late work, or it may result in a lower grade. Computer or Internet malfunctions do not constitute an excuse for late work; students should have their work prepared in time to ensure that they can get it completed, edited, and proofread prior to the instructor's due date. These responsibilities assist the student in professional development.
- b. Generally, assignments missed from a serious sickness or family crises can be made up and the instructor should be notified as soon as possible to reach an agreement on due dates and possible penalties. Each instructor has his or her own late-work policy. Instructors use their own judgment in accepting late work.

4. Incompletes

On rare occasions, the grade of "I" may be given for work that is incomplete at the time grades are given. It is given only after the instructor and the department chair or college dean approve a petition submitted by the student that his or her work is incomplete for good cause. Good cause typically consists of a catastrophic event in which the student is prevented from completing the course requirements. It is the responsibility of the student to initiate the petition through http://petitions.oru.edu, make up any incomplete work, and ask the instructor to submit a grade change to the registrar. If the work is not completed by the end of the subsequent session, the incomplete will automatically convert to an "F." For graduating seniors, the degree will be awarded in the term that the student completes his or her course work, not the final term of enrollment.

5. Citations

Textbook(s) and materials for the course are listed using standard <u>citation style</u> (APA, MLA, Chicago, Turabian, etc.). Since other styles may be used in disciplines other than the one used in this course or school, the <u>ORU Citing and Documenting Sources</u> pages offer a collection of styles students may choose from. This course asks that students be consistent in whatever style they use throughout the course.

C. Online Programs Policies and Procedures

- 1. **Communicating with your Instructor:** All email communication between students and faculty will be through their ORU.edu emails.
- 2. **Learning Community:** Online learning community is established through active participation in the threaded weekly discussions. The mutual exchange of ideas, information, and experiences is an essential part of the learning process, and students are encouraged to use the discussion forum as virtual classroom platform.
- 3. ADA and Students with Disabilities:
 - Click here (<u>http://www.brightspace.com/about/accessibility/</u>) to view Desire2Learn's "Accessibility Resources for Students with Disabilities."
 - Students requiring Disability Services from ORU, please click here: <u>https://goo.gl/QGoK4x</u>
 - Desire2Learn (D2L) Accessibility Guidelines and Checklist: https://goo.gl/Ck4RwY
 - D2L Accessibility Policy: <u>https://www.d2l.com/accessibility/</u>

4. Useful Links for Online Students:

- Student Learning Glossary
- Library: <u>http://library.oru.edu</u>.
- D2L Helpdesk: <u>d2lhelp@oru.edu</u>
- I.T. Student Helpdesk: <u>studenthelpdesk@oru.edu</u>
- Netiquette and Online Discussions: https://goo.gl/f744AY
- Contact the University: please <u>fill out this online form</u>. Please first contact your instructor for assistance with any matter specific to the course.

D. Course Policies and Procedures

1. Evaluation Procedures: The final grade will be based on forum discussions, projects, and a final exam. The weight of each item is included in the Course Calendar. Extra credit items are not offered in this course.

Grade Weight	Category
13.86%	Forum Discussions
36.63%	Projects: Homework Assignments
9.9%	Practice Midterm Test and Practice Final Test
39.7%	Midterm and Final Exams

2. Evaluation Procedure:

A=90-100% B=80-89% C=70-79% D=60-69% F=59% and below.

3. Other Policies and/or Procedures

None

VIII. COURSE CALENDAR

The Course Calendar shows the specific learning activities and assessments for this course, along with their respective grade weights. The far-right column lists the Course Objectives (CO) that support the corresponding Assessment in column 2. Further descriptions for activities and assessments are in their respective weeks in D2L. † indicates this is a faith integration item tracked by the program.

Unit 1	Whole Numbers, Applications and Introduction to Fractions	Hours	Weight	CO
	Read/View/Listen	9		
	Forum 1: Prior Math Experience	2	0.99%	5
	MyMathLab: Orientation Homework	.5	0.99%	1
	MyMathLab: HW 1 (Sections 1.2-1.3)	.5	0.99%	1
	MyMathLab: HW 2 (Sections 1.4-1.5)	.5	0.99%	1
	MyMathLab: HW 3 (Sections 1.6-1.8)	.5	0.99%	1
	MyMathLab: HW 4 (Sections 1.8-1.10)	1	0.99%	1
	MyMathLab: HW 5 (Sections 2.1-2.2)	1	0.99%	1
	MyMathLab: HW 6 (Section 2.3)	1	0.99%	1
Unit 2	Multiplying & Dividing Fractions	Hours	Weight	CO
	Read/View/Listen	7		
	Forum 2: My Favorite Scripture Verse/Passage, And What It Means to Me †	2	0.99%	5
	MyMathLab: HW 7 (Section 2.4)	1	0.99%	1
	MyMathLab: HW 8 (Section 2.5)	1	0.99%	1
	MyMathLab: HW 9 (Section 2.7)	1	0.99%	1
	MyMathLab: HW 10 (Section 3.1)	1	0.99%	1
	MyMathLab: HW 11 (Section 3.2)	1	0.99%	1
	MyMathLab: HW 12 (Section 3.3)	1	0.99%	1
	MyMathLab: HW 13 (Section 3.5)	1	0.99%	1
Unit 3	Fractions & Order of Operations/Exploring Decimals	Hours	Weight	CO
	Read/View/Listen	8		
	Forum 3: I Get By With A Little Help	2	0.99%	5
	MyMathLab: HW 14 (Sections 4.1-4.2)	1	0.99%	1
	MyMathLab: HW 15 (Section 4.3)	1	0.99%	1
	MyMathLab: HW 16 (Section 4.4-4.5)	1	0.99%	1
	MyMathLab: HW 17 (Section 4.6)	1	0.99%	1
	MyMathLab: HW 18 (Section 5.1, 5.3)	1	0.99%	1
	MyMathLab: HW 19 (Section 6.1-6.2)	1	0.99%	1
Unit 4	Midterm Week & Intro to Real Numbers	Hours	Weight	C0
	Read/View/Listen	4		
	Forum 4: Order in God's Word †	2	0.99%	5
	MyMathLab: Practice Midterm	6	4.95%	1,2
	MyMathLab: Midterm Exam	2	19.6%	1,2
	MyMathLab: HW 20 (Section 9.1)	1	0.99%	1
			0.7770	

Unit 5	Basic Math Operations on Real Numbers & Introduction to Algebra	Hours	Weight	CO
	Read/View/Listen	7		
	Forum 5: Order in God's Word	2	0.99%	5
	MyMathLab: HW 22 (Section 9.3)	1	0.99%	1,4
	MyMathLab: HW 23 (Section 9.4-9.5)	1	0.99%	1,4
	MyMathLab: HW 24 (Section 9.6)	1	0.99%	1,4
	MyMathLab: HW 25 (Section 9.7)	1	0.99%	1,4
	MyMathLab: HW 26 (Section 9.8)	1	0.99%	1,4
	MyMathLab: HW 27 (Section 10.1)	1	0.99%	1,4
	MyMathLab: HW 28 (Section 10.2)	1	0.99%	1,3,4
Unit 6	Linear Equations & Applications	Hours	Weight	СО
	Read/View/Listen	6		
	Forum 6: Numbers in the Bible	2	0.99%	5
	MyMathLab: HW 29 (Section 10.3)	1	0.99%	1,3,4
	MyMathLab: HW 30 (Sections 10.4-10.5)	1	0.99%	1,3,4
	MyMathLab: HW 31 (Section 11.1)	1	0.99%	1,3,4
	MyMathLab: HW 32 (Section 11.2)	1	0.99%	1,3,4
	MyMathLab: HW 33 (Section 11.3)	1	0.99%	1,3,4
	MyMathLab: HW 34 (Section 11.4-11.5)	1	0.99%	1,3,4
Unit 7	Rules of Exponents	Hours	Weight	CO
	Read/View/Listen	4		
	Forum 7: My Take-Aways From This Class	2	0.99%	5
	MyMathLab: HW 35 (Section 12.1)	1	0.99%	1,3,4
	MyMathLab: HW 36 (Section 12.2)	1	0.99%	1,3,4
	MyMathLab: Practice Final	8	4.95%	1,2, 3, 4
	MyMathLab: Final Exam	2	19.6%	1,2, 3, 4
Course	Total estimated hours based upon an average of	116	100%	
Total	16 hours per week for 7 weeks	110	100/0	

IXI. COURSE INVENTORY

MAT 099 ADV Introduction to College Mathematics

This inventory indicates the extent to which this Course's Objectives contribute to the Outcomes of its degree Program, and ultimately to one or more of ORU's University Outcomes (in grey below):

- Significant Contribution Addresses the outcome directly and includes targeted assessment.
- Moderate Contribution Addresses the outcome directly or indirectly and includes some assessment.
- Minimal Contribution Addresses the outcome indirectly and includes little or no assessment.

OUTCOMES	Significant	Moderate	Minimal
1. Spiritual Integrity			
Program Outcome 1. CORE LITERACY: Have a breadth of knowledge essential to a classical Spirit-empowered liberal arts education.			x
• Course Objective 5: Discuss mathematical and math-related concepts.			X
2. Personal Resilience			
3. Intellectual Pursuit			
Program Outcome 1. CORE LITERACY: Have a breadth of knowledge essential to a classical Spirit-empowered liberal arts education.		x	
• Course Objective 1: Perform operations on whole numbers, integers, fractions, and decimals.		x	
• Course Objective 2: Write ratios, proportions, and percents and solve problems with them.		x	
• Course Objective 3: Perform operations on real number algebraic expressions and equations.		x	
Course Objective 4: Solve and graph linear equations.		X	
Course Objective 5: Discuss mathematical and math-related concepts.		X	
4. Global Engagement			
5. Bold Vision			
3. DULU VISION			

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This syllabus is subject to change without notice up until the first day of the semester.

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